REMARKS/ARGUMENTS

Claim Rejections under 35 U.S.C. §112 should be Withdrawn

Claims 1-39 are rejected under 35 U.S.C. §112, first paragraph, for alleged lack of enablement.

The Examiner alleges that the Claims do not reflect the particular steps and multiple linear regression models used in the examples to achieve the goal of selecting oligonucleotide probes and no guidance is provided on other computer implemented methods for selecting oligonucleotide probes. Applicants respectfully disagree. The Claims should not be limited to the specific examples in the Specification. The Specification, for example, in page 16, teaches that a physical model that is based on the thermodynamic properties of the sequence can be used to predict the hybridization intensities. The Specification (e.g., page 17) also teaches that the there are a number of ways to establish the relationship between the sequence and free energy of the hybridization. In some embodiments, the parameters are determined by multiple linear regressions. Other methods for determining model parameters empirically were well known to anyone who is familiar with statistics.

The Examiner also alleges, without providing specifics, that the examples in the specification fail to provide sufficient information or guidance to permit one of ordinary skill in the art to reproduce them. Applicants strongly disagree. The specification from pages 16 to pages 23 teaches various exemplary models/equations. Pages 23 to 32 teach various computational approaches, including software modules for carrying out exemplary methods. In addition, pages 32-35 provide three actual examples that were carried out during the design phase of world's first whole genome expression chip set (now the first whole genome chip). The processes, including model building, estimation

of parameters, predictions and probe selections are described in great detail. In additions, one specific implementation of computational tools is also provided (pages 27-32). Applicants respectfully submit that these examples are described in sufficient details for one of skill in the art to reproduce them.

The Examiner also alleges that "the applicants did not provide explanation supporting their assertion that the method as claimed is enabled by the specification." Applicants respectfully submit that Applicants, in the previous response, specifically pointed that the Specification, for example, in page 16, teaches that a physical model that is based on the thermodynamic properties of the sequence can be used to predict the hybridization intensities. The Specification (e.g., page 17) also teaches that there are a number of ways to establish the relationship between the sequence and free energy of the hybridization. In some embodiments, the parameters are determined by multiple linear regressions. Other methods for determining model parameters empirically were well known to anyone who is familiar with statistics. Once again, the Examiner, without any support, alleges that the examples in the specification could not be reproduced. As discussed above, the examples are described in great detail for one of skill in the art to reproduce them.

The Examiner also alleges that much of the referenced information is improperly incorporated by reference. Applicants respectfully disagree and submit that the Examiner fails to provide specific information about which references are impacted and how they are related to the enablement issue.

In summary, the specification specifically teaches that there are a number of ways to establish the relationship between the sequence and free energy of the hybridization. In some embodiments, the parameters are determined by multiple linear regressions.

Other methods for determining model parameters empirically were well known to anyone who is familiar with statistics. In addition, specific examples, including computational tools are provided for specific embodiments. For the above reasons, the claims are fully enabled to their full scope. Applicants respectfully submit that this rejection of the Claims should be withdrawn.

CONCLUSION

For these reasons, Applicants believe the application is now in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5000.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account 01-0431.

If the Examiner has any questions pertaining to this application, the Examiner is requested to contact the undersigned attorney.

Respectfully submitted,

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